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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/779,850

02/18/2004

Hideyuki Kubota

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EXAMINER

FALASCO, LOUIS V

ART UNIT

PAPER NUMBER

1773

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
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3 MONTHS

04/05/2007

PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/779,850	<b>Applicant(s)</b> KUBOTA, HIDEYUKI	
	<b>Examiner</b> Louis Falasco	<b>Art Unit</b> 1773	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 11/22/07.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-8 is/are pending in the application.
- 4a) Of the above claim(s) 3 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,4-8 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)         | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

## DETAILED ACTION

### *Papers Received*

1. This application is acknowledged as a Request for Continuing Examination (RCE).
2. The Amendment and Remarks filed 12/22/07 are acknowledged.
3. The Statement of Substance of Interview filed 01/16/07 is acknowledged.

### *Claims*

4. Claims are: 1-8.
  - a. Claim 3 remains withdrawn from consideration as a non-elected invention.
5. Claims 1, 2 and 4 to 8 remain under consideration.
6. Claim rejections made in the previous Office action are no longer maintained.

### *Statutory Basis*

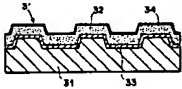
*The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.*

## ***Rejections***

7. (New) Claims 1, 2, 4, 5, 7 and 8 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over **Nagao et al** (US 20010028964).

**Nagao et al** teaches a magnetic master information carrier having a pattern of protrusions and recesses with magnetic layer and an overlying protective layer.

**Nagao et al** discloses a master information carrier with substrate having protrusions and recesses (Fig. item 31) and a magnetic layer (Fig. item 32) covered by a protective layer (Fig. item 34). The magnetic layer upper and inclined side segments are completely covered by the protective layer. This is

illustrated at Fig. 2: , showing the protective layer following tops and sides of the magnetic layer, also see ¶ [0033], [0054], [0077].

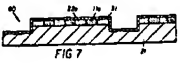
Alternate to anticipation, it would have been at least obvious to provide a protective layer fully on magnetic layer tops and sidewalls, as a matter of routine optimization. **Nagao et al** teaches applying protective coating over the magnetic layers and repeatedly points out that the protective layer is applied to protect the magnetic layer, e.g., see ¶[0060] and [0057], [0067], [0070], etc. The worker of ordinary skill would appreciate the protective layer must obviously be on both tops and sides of the entire magnetic layer, since **Nagao et al** calls for the magnetic layer relief pattern to be protected by the layer (Fig. item 34) ¶[0073], [0083].

- With regard to claim 2 *DLC* material, **Nagao et al** discloses diamond-like carbon at ¶[0054].
- With regard to claim 5 protective layer, **Nagao et al** discloses the protective layer over the magnetic layer at ¶[0060] and ¶[0057], [0067], [0070], etc. Therefore, the protective and magnetic layers would be the same width.
- With regard to claim 6 *unused* disk area having the protective coating, **Nagao et al** teaches a magnetic master information carrier inherently capable of an area not being used - merely dependant on an intended use. Typical intended use would include only applying transferring magnetic current in select areas of the disk. Intended process is not given weight when, as in the instant case, the use is merely selection of an area to pass magnetic current, not requiring any structural difference in the article. See, e.g., *In re Otto*, 136 USPQ 458, 459.
- With regard to claim 7 lower layer, in **Nagao et al** a lower layer (Fig. item 33) is provided between magnetic layer and substrate, ¶[0078].
- With regard to claim 8, both applicants and the prior art disclose diamond-like carbon protective layers. Since the materials are similar, there physical properties including free energy would be similar. *In re Best*, 195 USPQ 430, 433.

8. (New) Claims 4 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over **Nagao et al** (US 20010028964) as applied to claims 1, 2, 5, 7 and 8 above, and further in view of **Saito et al** (US 6613459).

**Nagao et al** does not specify a protective coating layer area wider than the magnetic area of the disk (claim 4), and does not specify if there will be an *unused* area of the disk having the protective coating layer (claim 6). However, **Saito et al** teaches a protective coat area wider than the magnetic layer area and that an area having the protective coat specifically does not have magnetic material, hence that areas would be incapable of magnetic transfer use.

**Saito et al** teaches a protective coat (Fig. item 31) shown in any of Figs 4-8, e.g.

Fig. 7:  col. 5 lns 59, 60 - illustrating an area beyond the magnetic layer thus, demonstrating the convention of a wider protective layer area than the magnetic layer area. **Saito et al**, in having no magnetic material under the protective layer (Fig. item 3a), would inherently have areas unused for magnetic transfer since these areas are incapable of magnetic transfer.

It would have been obvious to one having ordinary skill in the art at the time the invention was made have an *unused* disk area of the **Saito et al Master Information Carrier** in the **Nagao et al Master Information Carrier** to improve division between magnetic format areas. One skilled in the art would have been motivated to adopt *unused* disk area with the expectation of better isolating formatted magnetic regions by omitting magnetic material from the portion not being used as an area for transference of magnetic current (**Saito et al** col. 5 lns 11-13, 35, 36 and col. 7 lns 19, 20).

### ***Conclusion***

The claims under consideration are 1, 2 and 4 to 8.

- No claim has been allowed.

### **INQUIRES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Louis Falasco, PhD whose telephone number is (571)272-1507. The examiner can normally be reached on M-F 10:30 - 7:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol D. Chaney, PhD can be reached at (571)272-1284. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
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03/07

  
**CAROL CHANEY**  
SUPERVISORY PATENT EXAMINER